













Heathfield MEPP Tables

Proposed Tables for Permit Variation 012 (September 2019)

Permit Schedule 3, Revised Table S3.1

Monitoring Point Ref/Description As shown on Plan HEA3000	Limit	Monitoring frequency	Monitoring standard or method
Operational Cells or Phases ¹			
HF/004ALM, HF/005ALM, HF/012ALM, HF/017LM, HF/021LM, HF/022ALM, HF/025BLM.	2 metres above cell base	Monthly	
Non Operational Cells or Phases ²			
HF/001LM, HF/002ALM, HF/003ALM, HF/008LM, HF/010LM, HF/027LM, HF/028LM, HF/029LM, HF/030LM, HF/031LM, HF/032LM, HF/033LM HF/035LM, HF/036LM	2 metres above cell base		In accordance with LFTGN02, or otherwise as agree with the Agency in
HF/034LM	2.5 metres above cell base	Quarterly	writing
HFS001LM, HFS002LM, HFS003LM, HFS004LM, HFS005LM, HFS006LM	5 metres above cell base		

¹ Any cells or phases that do not have a final engineered cap agreed in accordance with the existing 'landfill

Permit Schedule 3, Revised Table S3.10

Monitoring Point	- other monitoring requirements Parameter	Monitoring	Monitoring standard or	Other	
Ref/Description		frequency	method	specifications	
Operational Cells or Pha					
HF/004ALM, HF/005ALM, HF/012ALM, HF/017LM, HF/021LM,	pH, EC, total alkalinity, ammoniacal nitrogen, chloride, COD, BOD, cadmium, chromium, copper, lead, nickel, iron, arsenic, magnesium, potassium, total sulphates, calcium, sodium, zinc, manganese	Quarterly	As specified in Environment Agency TGN02 (February 2003) and Horizontal		
HF/022ALM, HF/025BLM.	Hazardous substances	Annually	Guidance Note H1 -		
	Depth to base (mAOD)	Annually	Environmental Risk Assessment for		
Non Operational Cells of	or Phases ²		permits, Annex J3,	None	
HF/001LM, HF/008LM, HF/010LM, HF/027LM, HF Cells 3, 10, 11 LQ,	pH, EC, total alkalinity, ammoniacal nitrogen, chloride, COD, BOD, cadmium, chromium, copper, lead, nickel, iron, arsenic, magnesium, potassium, total sulphates, calcium, sodium, zinc, manganese	Annually	version 2.1, December 2011 with one sampling point per cell / phase or such other subsequent guidance as may be agreed in writing with the Environment	None	
HFS001LM, HFS005LM.	Hazardous substances	Once every four years	Agency.		
	Depth to base (mAOD)	Annually			

¹ Any cells or phases that do not have a final engineered cap agreed in accordance with the existing 'landfill

Permit Schedule 3, Revised Table S3.8

Table S3.8 Groundwater – other monitoring requirements

Monitoring Point Ref /Description	Parameter	Monitoring frequency	Monitoring standard or method
	Water level, electrical conductivity, chloride, ammoniacal nitrogen, pH	Quarterly	As specified in Environment Agency TGN02 'Monitoring of Landfill Leachate,
Up gradient HF/220WM, HF/222WM	Total alkalinity, magnesium, potassium, total sulphates, calcium, sodium, chromium, copper, iron, lead, nickel, zinc, manganese	Annually	Groundwater and Surface Water' (February 2003), Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J3, version 2.1, December 2011, or such other subsequent guidance as may be
	Hazardous substances	Annually for first six years of operation	agreed in writing with the Environment Agency.
Down or cross gradient	Water level, electrical conductivity, chloride, ammoniacal nitrogen, pH	Quarterly	As specified in Environment Agency TGN02 'Monitoring of Landfill Leachate,
HF/001WM, HF/003WMA, HF/012WM, HF/019WM, HF/025WMA,	Total alkalinity, magnesium, potassium, total sulphates, calcium, sodium, chromium, copper, iron, lead, nickel, zinc, manganese	Annually	Groundwater and Surface Water' (February 2003), Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J3, version 2.1, December 2011, or such
HF/026WM, HF/032WM, HF/033WM, HF/203AWM, HF/214AWM, HF/215AWM, HF/218AWM, HF/002GM, HF/037GM, HF/310WM, HF/311WM	Hazardous substances detected in leachate	Annually for first six years of operation then every two years	other subsequent guidance as may be agreed in writing with the Environment Agency. After initial six year monitoring period for hazardous substances, if the results of quarterly or annual monitoring suggest an increase in contamination, the operator shall also undertake a full leachate hazardous substances screen.
Groundwater monitoring points HF/220WM, HF/222WM, HF/001WM, HF/003WMA, HF/012WM, HF/019WM, HF/025WMA, HF/025WMA, HF/033WM, HF/203AWM, HF/203AWM, HF/215AWM, HF/218AWM, HF/218AWM, HF/218AWM, HF/218AWM, HF/218AWM, HF/002GM, HF/037GM, HF/3110WM, HF/3110WM, HF/311WM	Base of monitoring point (mAOD)	Annually	



LEACHATE MONITORING POINT

S LEACHATE SUMP

PERIMETER GAS MONITORING POINT DUAL GAS / GROUND WATER MONITORING

GROUND WATER MONITORING POINT

SURFACE WATER MONITORING POINT

AIR EMISSIONS MONITORING POINT

DEPOSITIONAL DUST GAUGE

AIR QUALITY MONITORING POINT

25 F.I.D MONITORING POINT
SEFFLUENT MONITORING POINT

(UG) UP GRADIENT (DG) DOWN GRADIENT (CG) CROSS GRADIENT

(US) UP STREAM
(DS) DOWN STREAM

→ DIRECTION OF FLOW

AS BUILT CELL BASAL AREA
ENVIRONMENTAL PERMIT BOUNDARY

TO BE READ INCONJUNCTION WITH MEPP TABLES

FOR IN WASTE GAS MONITORING WELLS SEE SEE THE SITE 4000 STANDARD PLAN



HEATHFIELD

LANDFILL

MONITORING AND EXTRACTION POINT

PLAN - PAGE 2 OF 3

PRELEMBURAF /DRN MG

INTERNALLY, ALL ARE SUBJECT TO ZONE 1 UNLESS OTHERWISE MARK

engineering' condition 2.4

² Any cells or phases that have a final engineered cap agreed in accordance with the existing 'landfill engineering' condition 2.4

condition 2.4

engineering' condition 2.4 ² Any cells or phases that have a final engineered cap agreed in accordance with the existing 'landfill engineering' condition 2.4

Permit Schedule 3, Revised Table S3.4

Table S3.4 Groundwat	er – emission limits and	monitoring req	uirements			
Monitoring Point Ref	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method	
HF/019WM, HF/033WM.	Ammoniacal nitrogen	6.3 mg/l		Quarterly	As specified in Environment Agency Guidance TGN02	
HF/310WM, HF/002GM,	Chloride	250 mg/l	Spot		'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), Horizontal Guidance	
HF/003WMA, HF/026WM, HF/032WM, HF/219AWM	Cadmium	0.001 mg/l	sample			
	Toluene	0.004 mg/l			Note H1 – Environmental Risk Assessment for	
	Chloride	250 mg/l	_		permits, Annex J3, version 2.1 December 2011 or such other subsequent guidance as may be agreed in	
	Cadmium	0.001 mg/l	Spot sample	Quarterly		
	Toluene	0.004 mg/l			writing with the Environment Agency.	

Permit Schedule 3, Revised Table S3.3

Table S3.3 Point so	ource emissions to	water (other	than sewer) -	emissions limit	s and monito	ring requirements
Monitoring Point Ref & location	Parameter	Source	Limit (incl unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
Discharge at NGR SX 8528 7642	Volume	New lagoon		Spot sample	Monthly	As specified in Environment Agency TGN02
(HF New Lagoon Dis)	pН			Opot sample	Wonting	(February 2003) or such other
Discharge at NGR SX 8585 7604	Volume	Lagoon No	500 m³/day	Spot sample	Monthly	subsequent guidance as may be agreed in writing with the Environment
(HF No Lagoon 1 Dis)	pН	1	>6 to <9		Worlding	
Discharge at NGR	Ammoniacal nitrogen	-	0.5 mg/l			Agency. Or as otherwise
SX 8631 7644 (HF SW Lagoon 1 Dis)	рН	Eastern Lagoon	>6 to <9	Spot sample	Monthly	agreed with the Agency as part of a leachate management plan.

Permit Schedule 3, Revised Table S3.11

Table S3.11 Surface water – other monitoring requirements							
Monitoring Point Ref /Description	Parameter	Monitoring Frequency	Monitoring Standard or Method	Other specifications			
HF New Lagoon, HF No.1 Lagoon, HF SW Lagoon 1, HF Teign Upstream, HF Teign Downstream, HF Ugbrooke Upstream, HF Ugbrooke Downstream	Ammoniacal nitrogen Chloride Suspended solids Visual Oil and Grease pH Electrical conductivity	Monthly	Spot sample	As specified in Environment Agency Guidance TGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J3, version 2.1 December 2011 or such other subsequent guidance as may be agreed in writing with the Environment Agency.			

Permit Schedule 3, Table S3.5

Monitoring Point Ref /Description	Parameter	Limit (including units)	Monitoring Frequency	Monitoring Standard or Method
HF/002GM, HF/003GM, HF/004GM, HF/008GM, HF/009GM, HF/010GM, HF/011GM, HF/011GM, HF/011GM, HF/011GM, HF/014AGM, HF/015AGM, HF/016GM, HF/017GM, HF/018GM, HF/023GM, HF/020GM, HF/022AGM, HF/023GM, HF/024GM, HF/025GM, HF/027GM, HF/025GM, HF/037GM, HF/201AGM, HF/202GM, HF/203AGM, HF/201AGM, HF/205AGM, HF/204AGM, HF/205AGM, HF/204AGM, HF/205AGM, HF/204AGM, HF/205AGM, HF/204AGM, HF/215AGM, HF/214GM, HF/216AGM, HF/203AGM, HF/204AGM, HF/215AGM, HF/216AGM, HF/203AGM, HF/203AGM, HF/203AGM, HF/204AGM, HF/205AGM, HF/206AGM, HF/204AGM, H	Methane	1 % v/v	Monthly	As per LFTGN03 (Sept 2004) or such other subsequent guidance as may be agreed in writing with the Environment Agency.
HF/001GM, HF/002GM, HF/003GM, HF/004GM, HF/008GM, HF/009GM, HF/010GM, HF/011GM, HF/012GM, HF/013GM, HF/013GM, HF/014AGM, HF/015AGM, HF/016GM, HF/017GM, HF/018GM, HF/019GM, HF/022GM, HF/023GM, HF/023GM, HF/024GM, HF/025GM, HF/026GM, HF/027GM, HF/020GM, HF/037GM, HF/201AGM, HF/202GM, HF/203AGM, HF/201AGM, HF/205AGM, HF/203AGM, HF/204AGM, HF/205AGM, HF/204AGM, HF/215AGM, HF/215AGM, HF/214GM, HF/215AGM, HF/216AGM, HF/216AGM, HF/216AGM, HF/223AGM, HF/224GM and HF/309GM	Oxygen Atmospheric Pressure Differential Pressure Carbon Dioxide	No Limit	Monthly	Record whether the ground is: - Waterlogged, - Frozen or - Snow covered.



LEACHATE MONITORING POINT

LEACHATE SUMP

PERIMETER GAS MONITORING POINT DUAL GAS / GROUND WATER MONITORING

GROUND WATER MONITORING POINT
SURFACE WATER MONITORING POINT
AIR EMISSIONS MONITORING POINT

DEPOSITIONAL DUST GAUGE

AIR QUALITY MONITORING POINT

F.I.D MONITORING POINT

FEFTURENT MONITORING POINT

(UG) UP GRADIENT (DG) DOWN GRADIENT (CG) CROSS GRADIENT

(US) UP STREAM
(DS) DOWN STREAM
→ DIRECTION OF FLOW

AS BUILT CELL BASAL AREA ENVIRONMENTAL PERMIT BOUNDARY

TO BE READ INCONJUNCTION WITH MEPP TABLES

FOR IN WASTE GAS MONITORING WELLS SEE SEE THE SITE 4000 STANDARD PLAN



HEATHFIELD LANDFILL

MONITORING AND **EXTRACTION POINT** PLAN - PAGE 2 OF 3

PREEMBUSAR D/DATE APR 2015 D/DRN MG D/APP SR

HF/001GM, HF/002GM, HF/003GM, HF/004GM, HF/008GM, HF/019GM, HF/011GM, HF/011GM, HF/015AGM, HF/013GM, HF/014AGM, HF/015AGM, HF/016GM, HF/020GM, HF/022AGM, HF/023GM, HF/024GM, HF/025GM, HF/027GM, HF/029GM, HF/037GM, HF/201AGM, HF/205AGM, HF/203AGM, HF/201AGM, HF/205AGM, HF/203AGM, HF/204AGM, HF/205AGM, HF/206AGM, HF/209AGM, HF/205AGM, HF/216AGM, HF/223AGM, HF/224GM and HF/309GM Record whether the ground is: - Waterlogged, - Frozen or - Snow covered. No Limit Monthly Honthly Record whether the ground is: - Carbon Differential Pressure Carbon Dioxide	HF/017GM, HF/018GM, HF/019GM, HF/020GM, HF/022AGM, HF/023GM, HF/024GM, HF/025GM, HF/026GM, HF/027GM, HF/029GM, HF/037GM, HF/201AGM, HF/202GM, HF/203AGM, HF/204AGM, HF/205AGM, HF/206AGM, HF/209AGM, HF/211AGM, HF/212AGM, HF/214GM, HF/215AGM, HF/216AGM, HF/223AGM, HF/224GM and HF/309GM	Methane	1 % v/v	Monthly	As per LFTGN03 (Sept 2004) or such other subsequent guidance as may be agreed in writing with the Environment Agency.
	HF/004GM, HF/008GM, HF/009GM, HF/010GM, HF/011GM, HF/012GM, HF/013GM, HF/014AGM, HF/015AGM, HF/016GM, HF/016GM, HF/017GM, HF/018GM, HF/020GM, HF/020GM, HF/023GM, HF/023GM, HF/020GM, HF/020GM, HF/020GM, HF/037GM, HF/027GM, HF/203AGM, HF/201AGM, HF/203AGM, HF/21AGM, HF/216AGM, HF/21AGM, HF/216AGM, HF/216AGM, HF/216AGM, HF/22AGM	Atmospheric Pressure Differential Pressure Carbon	No Limit	Monthly	Record whether the ground is: - Waterlogged, - Frozen or